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EXAMINER

EDELMAN, BRADLEY E

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 01/22/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/698,050

Applicant(s)

TULI, RAJA SINGH

Examiner

Bradley Edelman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) Z.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This Office action is in response to Applicant's amendment filed on October 31, 2003. Claims 1-68 are presented for further examination. Claim 1 has been amended and claims 2-68 are new claims. Because the amendment necessitates new grounds for rejection, this Office action is final.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 4, 17, 39, 46, and 59 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Regarding these claims, each of these claims requires that the remote device has "no running operating system." While the specification does mention briefly a computer that is "a simple terminal with no operating system running in it" (p. 11, lines 18-19), the specification does not describe how such a computer would then operate. It is not generally well known to

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operate network-enabled PDAs without an operating system. Thus, the device with "no running operating system" claimed is not enabled by the specification.

2. Claims 1, 10, 23, 34, 43, 52, and 65 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In considering claim 1, the term "the computer" on line 10 of the claim lacks sufficient antecedent basis. Appropriate correction is required.

In considering claims 10, 23, 34, 43, 52, and 65, the term "the configuration information" in these claims lacks sufficient antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 6, 8-10, 15-16, 19, 21-23, 27-28, 30, 32-34, 37-38, 41-45, 48, 50-52, 57-58, 61, and 63-65 are rejected under 35 U.S.C. 102(e) as being anticipated by Carter et al. (U.S. Patent No. 6,201,611, hereinafter "Carter").

In considering claim 1, as understood, Carter discloses a computer system (Fig. 3) that directs information to a first software ("device driver") associated with a peripheral device ("printer") connected to a port of a remote device ("thin client") in response to a request from the remote device (col. 5, lines 38-42, 55-65, wherein a client makes a print request to a server, and the request is sent to the printer driver software in the server), the first software modifying this information to generate control information to be recognized by the peripheral device (i.e. printer driver "generate[s] a Print-Ready Format data stream") and transmitting the control information to a connecting port capable of interfacing with the peripheral device (col. 5, line 67 – col. 6, line 2; "sends the Print-Ready Format data... back to the thin client 101," wherein a port on the thin client is inherent), the control information being intercepted by second software which diverts it to the remote device (col. 6, lines 3-5, "the print receiver component 113 on the thin client... sends [the received data] to a locally attached printer 105"), such that a two-way communication channel is provided between the computer system and the peripheral device through the port of the remote device to allow data to be sent between them and to allow the computer system to operate the peripheral device using the control information (i.e. the server and the printer thus communicate in both directions through the client, wherein the printer driver controls the peripheral print job).

Claims 2, 6, 15, 19, 27, 30, 37, 41, 44, 48, 57, and 61 present no further limitations over claim 1, and are thus rejected for the same reasons.

In considering claims 3, 16, 28, 38, 45, and 58, Carter further discloses that the server has a device driver, and the remote device (client) does not (Fig. 3).

In considering claims 8, 9, 21, 22, 32, 33, 42, 50, 51, 63, and 64, Carter further discloses that the peripheral device is a printer, the instructions from the portable device request to print a document, and the remote server generates the control information according to the document for printing on the printer (col. 6, lines 35-47).

In considering claims 10, 23, 34, 43, 52, and 65, as understood, Carter further discloses that the control information is transmitted to the remote device via a wireless connection (col. 3, line 50, "wireless device such as a palmtop computer").

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 18, 29, 40, 47, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter.

In considering claims 5, 29, and 47, Carter discloses a graphical interface at the portable device for specifying user options regarding the image to be printed (col. 6, lines 29-40, "graphics API," "print options selected by the user"), and applying the

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options at the server (col. 6, lines 44-47, "the routing information and printer properties are passed with a print job to a print rendering server"). Carter further discloses that the printer driver processes the print information at the server (col. 6, lines 61-67; col. 7, lines 1-12). However, Carter does not describe that the print options image that appears at the portable device is generated at the server and sent from there to the portable device. In other words, Carter only discloses storing printer driver software and performing printer driver functions at the server, instead of additionally storing and processing the printer *application* at the server (Carter describes that the printer applications are stored at the client – see Fig. 3).

Nonetheless, Carter does disclose the use of "thin clients" and further provides motivation for removing large application processes from the thin clients and placing them on the server in order to decrease memory usage at the clients (i.e. Carter does this with respect to the printer driver, see col. 1, lines 30-53). Given this knowledge, a person having ordinary skill in the art would have readily recognized the desirability and advantages of storing the printer application on server, and thus sending print option images from the server to the portable device for selection, in order to further reduce the amount of memory necessary at the client device. Therefore, it would have been obvious to generate the print options taught by Carter at the server, and to send them to the client for selection, as claimed.

In considering claims 18, 40, and 60, these claims include the same limitations as claim 5, and are thus rejected for the same reasons.

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5. Claims 7, 20, 31, 49, and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter, in view of Maniwa et al. (U.S. Patent No. 5,768,483, hereinafter "Maniwa").

In considering claims 7, 20, 31, 49, and 62, although the system taught by Carter discloses substantial features of the claimed invention, it fails to disclose that the peripheral device is a scanner (Carter instead discloses a printer). Nonetheless, the use of both printers and scanners in computer networks to allow remote printing and scanning of documents is well known, as evidenced by Maniwa (see Title, Abstract, Fig. 1). Given this knowledge, a person having ordinary skill in the art would have readily recognized the desirability and advantages of adapting the remote printing system taught by Carter for use with scanners in addition to printers, as taught by Maniwa, so that people who wish to either scan or print documents to or from a portable device can do so. Therefore, it would have been obvious to use the system taught by Carter with scanners, as taught by Maniwa.

6. Claims 11-12, 14, 24-25, 35-36, 53-54, 56, and 66-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter, in view of Koga (EP Patent No. 1,026,578).

In considering claims 11, 24, 35, 53, and 66, Carter further discloses the steps of:

Receiving at the server a request from the remote device for information (i.e. a request for default job and printer properties; col. 4, lines 50-52), transmitting the information to the remote device for display (i.e. user can modify the properties via a

user interface; col. 4, lines 53-55), wherein the instructions from the remote device is in connection with the information (i.e. the instructions are to print). However, Carter remains silent regarding the form of the user interface used to modify and select the print properties. Thus, Carter does not describe that the information is in document format and is rendered at the server as an image, and is then sent in compressed format to the remote device. Nonetheless, the use of an image-based print application interface is well known, as evidenced by Koga. In a similar art, Koga discloses a web browser for entering print options for a network printing service, wherein an image (i.e. Web page) is rendered at a server and sent to a client in order to allow the client to select print options (col. 6, lines 25-44). Thus, given the teaching of Koga, a person having ordinary skill in the art would have readily recognized the desirability and advantages of allowing selection of print options via a web-based interface (i.e. an image sent from the server to the client), because web-based interfaces are simple for Internet users to understand and operate. Therefore, it would have been obvious to use the image rendering function taught by Koga to allow selection of the print options taught by Carter.

Regarding the compression step, Examiner takes official notice that compressing information being sent over a network is well known in the computer networking art, and would have been obvious to a person having ordinary skill in the art in order to decrease network traffic.

In considering claims 12, 25, 36, 54, and 67, Carter further discloses that the device is a printer and the instruction is a print command (discussed previously).

In considering claims 14 and 56, the combined system of Carter and Koga further discloses that the document contains displayable information in non-image format, and discloses rendering the image from a portion of the information (inherent in web page HTML code). Furthermore, Examiner takes official notice that it is well known and standard practice for web page images to be larger than a display area of a display device (i.e. browsers have scroll bars so that the user can view all portions of the web page). Given this knowledge, it would have been obvious to a person having ordinary skill in the art (and it would have been expected) for the image to be larger than the display area in the remote device, because this would conform to standard web practice.

7. Claims 13, 26, 55, and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter, in view of Koga, and further in view of Mogul et al. (U.S. Patent No. 6,243,761, hereinafter "Mogul").

In considering claims 13 and 55, Koga further discloses that the document represents a web page having links ("browser" giving access to a "web server"). However, both Carter and Koga remain silent regarding the method of transmission of the web page to the client, and thus fail to disclose the claimed method of compressing the page image and dividing the compressed page into sections which are transmitted

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in a sequence to the remote device according to a display priority. Nonetheless, both compressing images sent over the web, and transmitting portions of a web page to a client in priority order are well known, as evidenced by Mogul (col. 4, lines 40-43, "reducing the size of the graphic image," and "the order in which the graphic images are sent to the client computer can be rearranged"). Given this knowledge, a person having ordinary skill in the art would have readily recognized the desirability and advantages of compressing the image information taught by the combined system of Carter and Koga and sending portions of the information in a priority order, as taught by Mogul, to better utilize network bandwidth and to ensure that the user receives the most important portions of the web page first. Therefore, it would have been obvious to include the compression and priority transmission features taught by Mogul in the web-based network printing system taught by Carter and Koga.

In considering claims 26 and 68, these claims contain similar limitations to claims 13 and 14 combined, and are thus are rejected for the same reasons.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. The new grounds of rejection were necessitated by the claim amendments.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley Edelman whose telephone number is (703) 306-3041. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on (703) 305-4792. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

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For all correspondences: (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

BE
January 15, 2004



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